IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of Dan KIKINIS

Confirmation No.: 6723

Serial No.: 10/037,842

Filed: Jan. 2, 2002

Group Art Unit: 2144

Examiner: Peling Andy SHAW
Attorney Docket No.: 1028-042-1

For: REMOTE PROXY SERVER AGENT

APELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. § 41.37, Appellants submit the following Brief on Appeal:

I. REAL PARTY IN INTEREST

Based on information supplied by Appellants, and to the best of Appellants' legal representatives' knowledge, the real party in interest is the assignee, InPro Licensing SARL.

II. RELATED APPEALS AND INTERFERENCES

Appellants, as well as Appellants' assigns and legal representatives, are unaware of any appeals or interferences which will be directly affected by, or which will directly affect, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 103-135 are currently pending. No claims have been allowed. Claims 1-102 have been canceled. Claims 103-135 are appealed. Claims 103-135 are set forth in the Appendix.

IV. STATUS OF AMENDMENTS

An amendment has been filed with this Appeal Brief pursuant to 37 C.F.R § 1.116 amending dependent claims 103 and 126-135 so as to place the claims in better condition for appeal. The amendment to claim 103 removes superfluous language from the claim. The amendments to claims 126-135 correct informalities in the preambles of the claims that depended from claim 125. The informalities in the claims were not cited in any office action and were only recently identified by the Appellant.

An Amendment After Final was filed by Appellants on October 24, 2008, which amendment included amendments to the claims. The amendment was entered by the examiner. As indicated in an Advisory Action mailed November 7, 2009, the Examiner withdrew rejections to claims 103-113 under 35 U.S.C. §112(2) and rejections to claims 103-135 made to the claims under 35 U.S.C. §112(1). The Examiner concluded that the Amendment did not place the claims in condition for allowance, and the rejections of claims under 35 U.S.C. §102(3) and §103(a) were continued.

On November 10, 2008, Appellant submitted a Supplemental Amendment After Final Rejection pursuant to 37 C.F.R. §1.116 to correct additional informalities in the claims so as to place the claims in condition for appeal. The Supplemental Amendment does not appear to have been entered, and no Advisory Action has been issued.

V. SUMMARY OF CLAIMED SUBJECT MATTER SUBJECT TO APPEAL

Appellants' invention as recited in the finally rejected claims is expressed as methods and as apparatuses. The apparatuses of the invention are recited in finally rejected and appealed claims 103-113 and 125-135. The methods of the invention are recited in finally rejected and appealed claims 114-124.

Appellants' disclosed and claimed invention is generally directed to a system and method for enabling remote access to applications residing on a processing system.

In the embodiment of independent claim 103, a system for enabling remote access to applications residing on a processing system is claimed. (See, Specification at ¶ 0008.) A firewall system is interposed between a first system and a second system. (See, Figure 1 (109); Specification at ¶ 0030.) The first system comprises a user device connected to a gateway via a first network. (See, Figure 1 (107); Specification at ¶¶ 0022 and 0023.) The user device comprises a client. (See, Figure 1 (108); Specification at ¶ 0022.) The gateway is connected to an insecure side of the firewall via a second network. (See, Figure 1 (102, 101, and 113).) The gateway comprises an instance of a remote gateway agent. (See, Figure 1 (105); Specification at ¶ 0032.) The second system comprises a processing system connected to a secure side of the firewall. (See, Figure 1 (116 a-n).) The processing system comprises an instance of a remote proxy agent and at least one application. (See, Figure 1 (117 a-n); Specification at ¶¶0031, 0032.) The remote gateway agent is configured for receiving at the remote gateway agent a client registration request from the remote proxy agent. (See, Figure 2 (200); Specification at ¶ 0034.) The client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent. (The registration request is performed through the firewall and thus establishes a

client-to-server connection between the remote proxy agent (as the client) and the remote gateway agent (as the server).) The gateway agent is further configured for receiving a request from the user device for a task to be performed by the at least one application residing on the processing system and forwarding the task request to the remote proxy agent residing on the processing system via the remote gateway agent. (See, Figure 2 (201, 203); Specification at ¶ 0035 and 0036.) The remote proxy agent comprises an interface to the at least one application (See, Specification at ¶ 0037) and is configured for sending the client registration request to the remote gateway agent, receiving and analyzing the task request from the remote gateway agent, selecting and executing the at least one application via the interface to process the request, and sending a result from the remote proxy agent to the remote gateway agent via the client-to-server connection through the firewall. (See, Specification at ¶ 0038-0040.)

In the embodiment of independent claim 114, a method for enabling remote data access to applications residing on a processing system is claimed. (See, Specification at ¶0008.) A remote proxy agent is configured on the processing system. (See, Figure 1 (117 a-n); Specification at ¶0031, 0032.) A remote gateway agent is configured on a gateway. (See, Figure 1 (105); Specification at ¶0032.) A firewall is interposed between the processing system and the gateway. (See, Figure 1 (109); Specification at ¶0030.) The processing system resides on the secure side of the firewall and the gateway resides on the insecure side of the firewall. (See, Figure 1 (109); Specification at ¶0030.) At the remote gateway agent a client registration request is received from a remote proxy agent. The remote proxy agent is registered with the remote gateway agent. (See, Figure 2 (200); Specification at ¶0034.). The client registration request creates a client-to-server connection

through the firewall. (The registration request is performed through the firewall and thus establishes a client-to-server connection between the remote proxy agent (as the client) and the remote gateway agent (as the server).) An interface between the remote proxy agent and the at least one application residing on the processing system is configured (See, Specification at ¶ 0037) for receiving at the remote gateway agent a request for access to the processing system from a user device via a first network, forwarding the request for access to the processing system, receiving and analyzing the request from the remote gateway agent at the remote proxy agent, executing the selected application via the interface to process the request, and sending a result from the remote proxy agent to the remote gateway agent via the client-to-server connection through the firewall. (See, Specification at ¶ 0038-0040.)

In the embodiment of independent claim 125, a remote proxy agent residing in a processing system for enabling remote data access applications is claimed. A registration processor comprises instructions for sending a registration request to a remote gateway agent residing on a gateway via a first network. (See, Figure 2 (200); Specification at ¶ 0034.) The client registration request creates a client-to-server connection through a firewall interposed between the remote proxy agent and the remote gateway agent. (The registration request is performed through the firewall and thus establishes a client-to-server connection between the remote proxy agent (as the client) and the remote gateway agent (as the server).) The gateway is accessible to a user device via a second network. (See, Figure 1 (107); Specification at ¶ 0022 and 0023.) A request analyzer is configured for receiving, parsing and verifying a task request forwarded by the remote gateway agent from the user device. (See, Figure 2 (201, 203); Specification at ¶ 0035 and 0036.) A request processor is configured for processing the task request for task-performance instructions. (See,

Specification at ¶ 0038-0040.) An application program interface is configured for sending the task-performance instruction to at least one application residing on the processing system. (See, Specification at ¶ 0038-0040.) A results processor is configured for sending a result from the software application to the remote gateway agent for forwarding to the user device. (See, Specification at ¶ 0038-0040.)

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issues on Appeal are:

Ground 1 – Whether Claims 103-104, 106-107, 109-112, 114-115, 117-118, 120-123, 125-126, 128-129 and 131-134 are anticipated by U.S. Patent 6,324,648 issued to Grantges (hereinafter, "Grantges").

Ground 2 – Whether Claims 105, 116 and 127 are unpatentable over Grantges in view of U.S. Patent Application Publication 2002/0118671 filed by Staples et al. (hereinafter, "Staples").

Ground 3 – Whether Claims 108, 113, 119, 124, 130 and 135 are unpatentable over Grantges in view of U.S. Patent 6,711,611 issued to Hanhan (hereinafter, "Hanhan").

VII. ARGUMENTS

In the discussion that follows, "Office Action" refers to the Final Office Action mailed on September 10, 2008

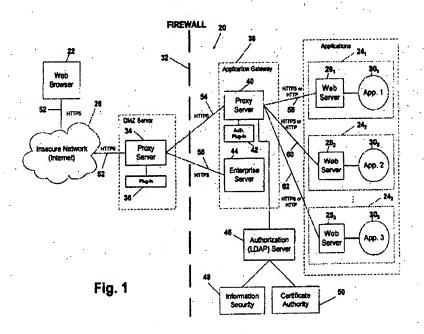
1. Rejection under 35 U.S.C. 102(a) Over U.S. Patent 6,324,648 issued to Grantges

Claims 103-104, 106-107, 109-112, 114-115, 117-118, 120-123, 125-126, 128-129 and 131-

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of the claimed invention. See, RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed sub nom., Hazeltine Corp. v. RCA Corp., 468 U.S. 1228 (1984). "A claim is anticipated only if each and every element as set forth in the claim is found,

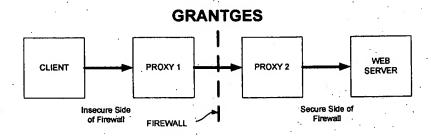
either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). (MPEP §2131, 8th Ed. (Rev. 1).)

Claims 103-104, 106-107, 109-112, 114-115, 117-118, 120-123, 125-126, 128-129 and 131-134 have been rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,324,648 issued to Grantges. For ease of discussion, **FIG. 1** of Grantges is presented below:

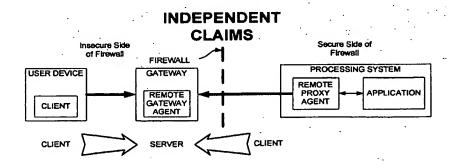


In Grantges, the application 24 comprises a destination or web server 28 and a program 30. Browser 22 interacts with program 30 via web server 28. The gateway proxy server provides a map of a path from the web server (28) through a firewall 32 to the browser 22. (See, Grantges, FIG. 1; Col. 5, line 65 to Col. 6, line 2.) The browser 22 is permitted to communicate with web server 28 by an exchange of certificates that is regulated by an authorization plug-in 42.

The general flow taught by Grantges and the flow taught by the present application are illustrated below (both simplified for discussion purposes).



It is important to note that if the firewall 22 and the permission structures were eliminated, browser 22 could communicate directly with web server 28. In contrast to the structure described in Grantges, the limitations of the independent claims at issue here require that the workstation/remote proxy agent initiate communications with the remote gateway before a request is submitted by a user device/client. This step is necessitated because from the perspective of the remote gateway both the user device/client and the remote gateway agent are "clients" of the remote gateway and cannot communicate directly. Thus, the remote gateway agent acts as a server to both the client operating on the user device (located on the insecure side of the firewall) and the remote proxy agent operating on the processing system (located on the secure side of the firewall). Grantges does not teach or reasonably suggest these limitations.



By utilizing the firewall in this way, the claimed inventions of the present application eliminate the complex firewall/authorization server structures while providing security to the data held on a workstation 116. Additionally, the remote proxy agent allows communications to pass through the firewall without the need for a proxy server (illustrated as a component of application gateway 38 in FIG. 1 of Grantges) as required by Grantges or for other components of application gateway 38.

Claim 103 recites the limitation, "receiving at the remote gateway agent a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent." The arguments presented in the Office Action and in the Advisory Action ignore the importance of the client registration request made from the secure side of the claimed firewall. That is, the request creates a client-server relationship between the remote proxy agent and the remote gateway agent.

This difference between the claimed invention and the prior art simply cannot be ignored.

Appellants note that Grantges describes an authentication process between a "web server" and an authorization server (see, claims 5 and 6 and description at Col. 7, lines 9-12). However, the web server referenced in these disclosures is web server 44 (labeled "Enterprise Server in FIG. 1 of Grantges) and not web server 28. Grantges does not disclose the receiving or sending of a registration message from a remote proxy agent (117 in FIG. 1 of the present application) residing on a processing system (116 in FIG. 1 of the present application) as recited in the independent claims of the present application.

Claim 103 also recites a communication between a client residing on a user device and the remote gateway agent. The remote gateway agent thus permits communications between two clients. This architecture permits secure communications between a user device and an application server without the need for the application gateway and supporting systems described in Grantges.

Based on the foregoing, Appellants submit that independent claim 103 is not anticipated by Grantges. Independent claims 114 and 125 recite limitations similar in scope to those recited in claim 1 and are also not anticipated by Grantges for the reasons set forth above.

Claims 104, 106, 107, and 109-112 depend from claim 103 and recite all of the limitations of that base claim. It follows that claims 104, 106, 107, and 109-112 are not anticipated by Grantges.

Claims 115, 117, 118, and 120-123 depend from claim 114 and recite all of the limitations of that base claim. It follows that claims 115, 117, 118, and 120-123 are not anticipated by Grantges.

Claims 126, 128, 129 and 131-134 depend from claim 125 and recite all of the limitations of that base claim. It follows that claims 126, 128, 129 and 131-134 are not anticipated by Grantges.

Appellants request that the rejections of claims 103-104, 106-107, 109-112, 114-115, 117-118, 120-123, 125-126, 128-129 and 131-134 be reversed.

2. Rejection under 35 U.S.C. 103(a) over Grantges in view of U.S. Patent Application Publication 2002/0118671 filed by Staples et al.

Claims 105, 116 and 127

Claims 105, 116 and 127 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Grantges in view of U.S. Patent Application Publication 2002/0118671 filed by Staples et al.

Claim 105 depends from claim 103 and recites all of the limitations of that base claim. Claim 103 has been rejected as being anticipated by Grantges. Staples is cited as teaching the additional limitation of claim 105 but is not cited as curing the deficiencies of Grantges discussed above. Based on the foregoing, claim 105 is patentable over the combination of Grantges and Staples.

Claim 116 depends from claim 114 and recites all of the limitations of that base claim. Claim 114 has been rejected as being anticipated by Grantges. Staples is cited as teaching the additional limitation of claim 116 but is not cited as curing the deficiencies of Grantges discussed above. Based on the foregoing, claim 116 is patentable over the combination of Grantges and Staples.

Claim 127 depends from claim 125 and recites all of the limitations of that base claim. Claim 125 has been rejected as being anticipated by Grantges. Staples is cited as teaching the additional limitation of claim 127 but is not cited as curing the deficiencies of Grantges discussed above. Based on the foregoing, claim 127 is patentable over the combination of Grantges and Staples.

3. Rejection under 35 U.S.C. 103(a) over Grantges in view of U.S. Patent 6,711,611 issued to Hanhan

Claims 108, 113, 119, 124, 130 and 135 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Grantges in view of U.S. Patent 6,711,611 issued to Hanhan.

Claims 108 and 113 depend from claim 103 and recite all of the limitations of that base claim. Claim 103 has been rejected as being anticipated by Grantges. Hanhan is cited as teaching the additional limitations of claim 108 and 113 but is not cited as curing the deficiencies of Grantges discussed above. Based on the foregoing, claims 108 and 113 are patentable over the combination of Grantges and Hanhan.

Claims 119 and 124 depend from claim 114 and recite all of the limitations of that base claim. Claim 114 has been rejected as being anticipated by Grantges. Hanhan is cited as teaching the additional limitations of claim 119 and 124 but is not cited as curing the deficiencies of Grantges discussed above. Based on the foregoing, claims 119 and 124 are patentable over the combination of Grantges and Hanhan.

Claims 130 and 135 depend from claim 125 and recite all of the limitations of that base claim. Claim 125 has been rejected as being anticipated by Grantges. Hanhan is cited as teaching the additional limitations of claims 130 and 135 but is not cited as curing the deficiencies of Grantges discussed above. Based on the foregoing, claims 130 and 135 are patentable over the combination of Grantges and Hanhan.

For the above reasons, Appellants respectfully ask that all of the rejections of the appealed claims be reversed. Appellants hereby petition for any extension of time that may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 18-1579.

Respectfully submitted,

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VIII. CLAIM APPENDIX

Claims Involved in the Appeal (Claims 103-135)

1-102 (Canceled)

103. A system for enabling remote access to applications residing on a processing system comprising:

a firewall system interposed between a first system and a second system, wherein the first system comprises:

a user device connected to a gateway via a first network, wherein the user device comprises a client; and

a gateway connected to an insecure side of the firewall via a second network, wherein the gateway comprises an instance of a remote gateway agent,

wherein the second system comprises:

a processing system connected to a secure side of the firewall, wherein the processing system comprises an instance of a remote proxy agent and at least one application, wherein the remote gateway agent is configured for:

receiving at the remote gateway agent a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent;

receiving a request from the user device for a task to be performed by the at least one application residing on the processing system; and

forwarding the task request to the remote proxy agent residing on the processing system via the remote gateway agent to the registered remote proxy agent, and wherein the remote proxy agent comprises an interface to the at least one application and is configured for:

sending the client registration request to the remote gateway agent;
receiving and analyzing the task request from the remote gateway agent;
selecting and executing the at least one application via the interface to process the
request; and

sending a result from the remote proxy agent to the remote gateway agent via the client-to-server connection through the firewall.

- 104. The system of claim 103, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.
- 105. The system of claim 103, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
- 106. The system of claim 103, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.
- 107. The system of claim 103, wherein the remote gateway agent is further configured for determining whether the user device is entitled to direct the request to the processing system.
- 108. The system of claim 103, wherein the first network is a wireless network and the user device is a wireless device.
- 109. The system of claim 103, wherein the second network is the Internet.
- 110. The system of claim 103, wherein the request specifies a serial execution of serial tasks and return of results.
- 111. The system of claim 103, wherein a plurality of requests is sent to the one or more data processing computers in an un-interrupted data session.
- 112. The system of claim 103, wherein the remote gateway agent is further configured for receiving the result, and sending at least part of the result to the user device via the first network.
- 113. The system of claim 112, wherein the gateway server instance is further configured for transcoding the result for viewing by the user device prior to sending the result to the user device.
- 114. A method for enabling remote data access to applications residing on a processing system comprising:

configuring a remote proxy agent on the processing system;

configuring a remote gateway agent on a gateway;

interposing a firewall between the processing system and the gateway, wherein the processing system resides on the secure side of the firewall and the gateway resides on the insecure side of the firewall;

receiving at the remote gateway agent a client registration request from a remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall;

registering the remote proxy agent with the remote gateway agent;

configuring an interface between the remote proxy agent and the at least one application residing on the processing system;

receiving at the remote gateway agent a request for access to the processing system from a user device via a first network;

forwarding the request for access to the processing system;

receiving and analyzing the request from the remote gateway agent at the remote proxy agent;

executing the selected application via the interface to process the request; and sending a result from the remote proxy agent to the remote gateway agent via the client-to-server connection through the firewall.

- 115. The method of claim 114, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.
- 116. The method of claim 114, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
- 117. The method of claim 114, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.
- 118. The method of claim 114 further comprising determining at the remote gateway agent whether the user device is entitled to direct the request to the processing system.

- 119. The method of claim 114, wherein the first network is a wireless network and the user device is a wireless device.
- 120. The method of claim 114, wherein the second network is the Internet.
- 121. The method of claim 114, wherein the request specifies a serial execution of serial tasks and return of results.
- 122. The method of claim 114, wherein a plurality of requests is sent to the one or more data processing computers in an un-interrupted data session.
- 123. The method of claim 114 further comprising receiving the result at the remote gateway agent and sending at least part of the result to the user device via the first network.
- 124. The method of claim 123 further comprising transcoding the result for viewing by the user device prior to sending the result to the user device.
- 125. A remote proxy agent residing in a processing system for enabling remote data access applications comprising:
- a registration processor comprising instructions for sending a registration request to a remote gateway agent residing on a gateway via a first network, wherein the client registration request creates a client-to-server connection through a firewall interposed between the remote proxy agent and the remote gateway agent and wherein the gateway is accessible to a user device via a second network;
- a request analyzer configured for receiving, parsing and verifying a task request forwarded by the remote gateway agent from the user device;
- a request processor configured for processing the task request for task-performance instructions;
- an application program interface configured for sending the task-performance instruction to at least one application residing on the processing system; and
- a results processor configured for sending a result from the software application to the remote gateway agent for forwarding to the user device.
- 126. The system of claim 125, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.

- 127. The system of claim 125, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
- 128. The system of claim 125, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.
- 129. The system of claim 125, wherein the remote gateway agent is further configured for determining whether the user device is entitled to direct the request to the processing system.
- 130. The system of claim 125, wherein the second network is a wireless network and the user device is a wireless device.
- 131. The system of claim 125, wherein the first network is the Internet.
- 132. The system of claim 125, wherein the request specifies a serial execution of serial tasks and return of results.
- 133. The system of claim 125, wherein a plurality of requests is sent to the one or more data processing computers in an un-interrupted data session.
- 134. The system of claim 125, wherein the remote gateway agent is configured for receiving the result, and sending at least part of the result to the user device via the second network.
- 135. The system of claim 134, wherein the gateway server instance is further configured for transcoding the result for viewing by the user device prior to sending the result to the user device.

IX. EVIDENCE APPENDIX

There is no evidence entered by the Examiner that is relied upon by Appellants.

X. RELATED PROCEEDINGS APPENDIX

There are no related proceedings.